



The News Letter of the Hobart Model Aero Club Inc. September 2017

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A give away

I have an Epson Stylus Photo 1290 Inkjet printer needing a new home. It works well and I have a colour and 2 black cartridges as spares.

Being an A3 printer it can produce plans which only require a small amount of work with Magic Tape to be useful. Its only problem is that it only has drivers for Windows 7 and XP/2000.

There are no drivers for Windows 8 or 10

It does not work under Windows 10 at all and may work under Windows 8 with a link to a Windows 7 computer I also have the original installation CD.

Price - Nothing if it is picked up from the club house by arrangement or collect from Port Huon

I have just updated my last computer to Windows 10 so I can't use it.

Regards Ken wardken@bigpond.com

A message from Nils

A note to thank the many members who, hearing of Billies hospitalisation, contacted me to check on her progress. I'm very happy to report she is at home and improving rapidly and will soon be able to cook. I never did discover the precise lurgi involved but "some form of Pneumonia" seemed to be the general opinion.

One special mention - our V.P. One Wilmot G, who introduced me to the Air Fryer and frozen potato chips. I also discovered a shop that sells huge beef pies, and yes, you can heat the pie in it as well.

About the only things it cannot handle are drinks or steaks and once I remove evidence of this knowledge acquisition, trying paint stripper next, all will be well.

Thanks again guys Cheers Nils

Jottings

There are no prizes for guessing the name of the member of the club executive who arrived at the field without his batteries.

A fellow member obliged with a couple of spare batteries and.....wait for it..... he had brought the wrong transmitter.

He obviously didn't really want to fly or perhaps senility is setting in – who knows?

This year we welcome back Erwin Boot, Joseph Ortoso and Michael Blackwell who have missed a year or two and it is very pleasing to have these experienced modellers returning.

We also welcome newcomers Andrew Clarke and Tony Vanderkelen and trust that they will receive all the help they need.

Unfortunately we have received news of the passing of TMAA president Clive Butler. Clive was a member of HMAAC back in the late 60s and early 70s and he was a first class scale modeller.

He was well known around the country for his brilliant scale models as could be seen in the last scale competition when he competed with his magnificent CAC Wirraway. He was a personal friend and will be missed.

Garth

Bill's Scale Column

Understanding Weathering By Stephen Carr

This article does not describe how to apply weathering, but covers what weathering is and the many different processes that make an airplane look scruffy and used. Whatever method and materials you intend to use for weathering, the golden rule to remember is "Refer to Photo's". There isn't a standard application of "dirt" that will magically transform a model into a miniature copy of the full size airplane. Studying photographs will show you what dirt is particular to that airplane at the time the picture was taken and what dirt is common to that type of airplane.

Weathering comes from, and is affected by, many factors, and we will look at them here in more detail.

SUN

Take two identical colour swatches and place one in a cupboard and the other next to a window. A month later, bring them together again and the one sitting in the sun will be faded in comparison to the other. Ultra violet light is the culprit, bleaching out colours. Airplanes are no different, and high altitude flight, such as that preformed by the USAAF, accelerates the fading process.

The fading is not uniform either. Top and side surfaces are more exposed than the undersides and different materials fade at differing rates. On many wartime airplanes, the flying controls were fabric covered to aid balancing and prevent flutter of the surfaces. These fabric surfaces faded extremely fast compared to the aluminium skin. Repairs to airplanes, where re-painted, were in fresh paint that stands out against the faded surrounding paintwork. Squadron codes and kill / mission markings were applied after test and delivery flights to the theatre of operation and so would not be as faded as the overall paintwork



The fabric rudder on this B-17 has faded slightly in comparison to the fin and the trim tab that can just be seen below the wing trailing edge



The metal panel around the exhaust stacks is steel and as a result, it discolours in a different way to aluminium. This airplane is actually painted silver rather than being natural metal, but on a natural metal airplane, the aluminium dulls down while the steel does stain. On olive drab painted airplanes, the paint fades differing amounts on steel and aluminium parts.

FUEL, OIL & LUBRICANTS

It doesn't matter how careful the ground crews are, fuel and oil etc., gets spilled on and wiped off airplanes. It is likely that around any of the liquid fill up points, that there will be staining of the paint work, in addition to chipped and worn paint work around the filler caps. Oil leaks are also found around the bottom of the cowl.



This slightly grainy picture of a Bf 109J shows streaks of blackened oil, from the oil cooler vent in the bottom of the cowl, extending back along the fuselage

FRETTING

Most often found around the cowl and engine compartment, fretting occurs where two pieces of metal are rubbing together, leaving a black oily deposit. Cowl fasteners are a favourite location due to engine vibration. Lubrication on hinge points, either control surfaces or access hatches, can also produce fretting marks.



This Bf 109J shows signs of fretting along the yellow cowl panels. The dark fuzzy stains extend back from the lower cowl panel fasteners.

EXHAUST STAINS

The mess from the engine exhaust has to come out somewhere, either straight out of the exhaust stubs such as on the Spitfire, or via a turbo supercharger like on the B-17 or Lightning. Its location will dictate how much staining there will be



These three pictures show exhaust staining. To the left is a Hellcat showing a red/brown/black twin trail. The dirt has also engrained itself into the panel lines along the rear fuselage. The Bf 109G exhaust trails clearly follow the airflow over the wing. Note how the cowl stands proud of the fuselage, resulting in a dense trail on the cowl and a fainter trail where the airflow has broken away from the fuselage. The exhaust trails on this P-51D show that the wings influence over the airflow extends right up to the cockpit.



WEATHER

If the airplane is stored outside, it will be subject to wind, rain, hail and whatever else the local climate can throw at it. Why do your house windows need cleaning? because rain deposits sand and dust on them. An airplane stored outside will be subject to streaking down the paintwork from dust and dirt deposits unless washed regularly. Damage to the fuselage side of multi-engine airplanes is likely due to ice breaking from propeller blades when de-icing equipment is in use. Dented skin and chipped paintwork will be evident on the fuselage in the plane of the propeller disc.



This DC-3 stood outside for over a year at Newcastle without any maintenance except periodic engine runs. Dirt has gathered in all the panel lines showing most clearly around the nose and engine cowlings.



This B-17's engine cowling shows damage to the paint from the blast of dust, rain and hail by the propeller. Not shown in this picture, but paint can be chipped and the fuselage skin can be dented in line with the propeller disc, by ice that forms on the blades and then breaks free.



This Vulcan B2 arrived straight to Sunderland Airport from Squadron service. Despite its high speed and all weather capability, stains caused by rain persist as seen here streaking down from the roundel and ahead of the pitot tube.

AIRFIELD CONDITIONS

The type of airfield operated from dictates airframe weathering also. Flying from a concrete runway will be a lot cleaner than from a reinforced muddy grass runway. Mud churned up by wheels will splatter the wing underside or fuselage in line with the plane of the wheels rotation. Dust and dirt can also be churned up by the propeller, which then blasts away areas of paint along the fuselage underside.



This Avenger, which is beginning its take off at Duxford, does not show any airfield weathering, 'though it does show how it can happen. If you look closely below the cowl (grey streaks against grass), you can see vortices of moisture sucked out of the damp atmosphere and also pulled up from the grass.



This P-51 shows severe paint damage on the radiator scoop as a result of dirt and dust being blasted back by the prop.

MAINTENANCE

Paint chipping, dents and scratches all happen during maintenance. Panels and cowls are frequently removed resulting in replacement screws and distorted panel edges. The replacement screws are unlikely to be painted. Paint will wear away on areas frequently walked on or held, such as the wing roots and hand holds etc. Replacement parts may not be painted such as on olive drab B-17's which received a natural metal finish replacement wing or tail plane. The cowl cooling gills on B-17's were fixed to the engine, so that a replacement engine on an old B-17 resulted in a ring of silver gills on an otherwise olive drab airplane.



Several replacement fasteners can be seen on this Mustang engine cowl as a result of wear from the constant removal and replacement of the panels by the ground crews. Paint has also chipped away along panel edges.

AIRFLOW

One of the major factors affecting the shape and form of weathering on an airframe is airflow. Leaks and drips that normally follow a near vertical route to the lowest point, now follow the boundary layer of air around the airframe. Oil streaks along the fuselage side arc up and then down following the airflow caused by the wing's lift. Stains at the wing root may curl under the fuselage as the air over the wing rejoins below the fuselage. Propeller rotation also affects the airflow around an airframe and may cause stains to curve against the normal direction of flight.

On the left wing of B-17's the oil staining tended to flow straight back. The rotation of air from the propeller was straightened due to the presence of the fuselage. On the right wing, airflow curved towards the wing root. This kind of weathering can be determined by studying several photographs of different airframes.



The prize for the scruffiest, most weathered, most patched B-17 must go to "Princess Pat". The airplane's paint has faded extremely due to ultra-violet exposure. Patches can be seen on the fabric control surfaces, which have been recovered and repainted at some point, as the metal trim tabs are a fresher green than the fuselage. The left outer wing panel has been replaced with one recovered from a "Hangar Queen" and due to its colour, has seen less high altitude flight. The engine nacelles are deeply stained from oil and leaking exhausts. Note how the staining thins out at the point where

the wing vents are located, behind the rear spar, as air is drawn out of the wing.

There you go, a brief guide to what makes an airplane weathered. Now you understand the many processes involved, you can go away and practice the techniques you know to apply 'age' to your model in a convincing manner.

President's Report

Well, it has been another fairly quiet month with only a little activity at KF by a few hardy souls. A lot of very cold mornings with frost but some nice flying weather for those that ventured out. Few photos if any with our 'Candid Cameraman' enjoying many a Chinese morsel. I still have not gotten over the chooks head in the soup!

Our intrepid travellers are still away, Jason in South Africa, Peter in China and JJ and Ray Stidson somewhere holed up in their campers on the mainland. Everybody healthy and a little less wealthy. Peter Gard and myself attended the 'Ashes Ceremony' for Clive Butler at the Phoenix Club recently. The weather was dismal to say the least. It was intended to drop his ashes from a model over the airfield however due to the weather they were spread on the runway by his two sons and daughter. The club very much appreciated HMAc making representation on the day.

Since Clives passing, Mike Rutledge of the 'Roaring Forties Club' has been nominated by the 'Northwest Aero Modellers' for the position of President of the TMAA and this has been seconded by LAMC and ECRCF. If any HMAc wish to nominate you have my blessing.

Since the AGM we, i.e.: mainly Peter Gard and Ken Ward have been busy getting the membership organised and finalised and Ken has set about streamlining our documentation/ record keeping and creating new membership and fee schedule forms along with welcoming information. We have

managed to maintain our membership with 3 losses and 3 gains. I have been asked in the past about other Tasmanian club numbers so for those of you that are interested they are, HMAc-53/7 Social, Roaring Forties-11, LMAc-30, NWA-021, TMA-6, S&EA-13, ECRCF-14, HRCF-5 and Phoenix-43.

I have been embroiled with the CCC in getting our roadside sign approved (incorrect size according to the Richmond criteria) however this has now culminated in having to go to planning approval. We may or may not be charged fees and we may or may not have to alter our sign. I expect to have a result within the next 2 weeks.

Because of a possible cost regarding this approval, our upgrade of the outdoor shelter floor has been put on hold. We intend to when the time comes redo it with pavers so will be calling on helpers to give a hand on the day. This alternative will be the least cost compared to concrete or timber.

The return of the horses is also on hold as we require access to the paddocks to erect a new sign. The driveway has a few holes and this will be attended to when the water dries out as it is a waste of time and material to fill water logged holes at this time. In the meantime, I know that you may get your tyres dirty but please try to keep to the main drive as to deviate around the water only increases the width of the problem breaking down the verge which is how problems evolve in the off road fraternity.

Phil Hubbard in answer to requests has increased the width of the small wheel runway by 1m so that smaller models can land a little closer to the pilot.

Our Gardening Australia' program is well under way and we should see some good results come Spring.

In the meantime, Happy Flying. Barry Gerrard

Future News Letters

It has come to my attention that there are few members from last year whom have not renewed their membership for this year.

It is my intention to remove these members from my News Letter list, so unless I hear anything to contradict this, this will be the last their last News Letter

Stuart

Call for Application for New MAAA Secretary in 2018

The current MAAA Secretary, has announced he will be retiring from this position after 30 November 2018. The MAAA Executive are therefore calling for applications to fill this position.

The MAAA Secretary is a full-time employed position reporting directly to the President of the MAAA. The Secretary is responsible for a vast array of duties from the day-to-day administrative tasks of the MAAA to team selection trials and team entries for international events. The position requires liaising with those stakeholders on behalf of the MAAA at the highest levels of the sport including CASA, ASAC, Local, State and Federal government as well as international bodies such as the FAI.

The MAAA Secretary is also responsible for the MAAA Registrars position which includes all member renewals, new members and membership card printing.

For a full job description contact either the MAAA President, Vice-President or Secretary. Nomination close on 31 December 2017

Neil Tank